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# Model No. RPC-GVG-TLE

**Grass Valley Group (GVG)**

**To**

**Telect (TLE)**

## **USER MANUAL**

Manual Version ..... 2.2 120403  
Document ID: ..... RPC-GVG-TLE\_User\_Manual.doc

# **1. REVISION HISTORY**

120403	Rev. 2.2	Company header information revised. Added DNF Controls Limited Warranty.
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# **2. DESCRIPTION**

Maintain control of your routers with DNF's Router Protocol Converter (RPC) — the missing link for control integration of routers from different manufacturers. The RPC lets routers from different manufacturers communicate with each other. Instead of using a different control system for each router in your facility, consolidate control under your main router. The other routers "look like" levels on your main system.

- Allows Grass Valley Group SMS7000 Router to control the TLE Router as a level on the SMS7000**
- The TLE looks like one or more levels on the GVG SMS7000**
- Fast and Easy to set up and use**
- Map TLE router levels to desired levels on the GVG SMS7000**
- The RPC "looks like" a GVG 20-TEN router to the GVG SMS7000**
- Supports up to 99 Input x 99 Output matrix**
- Supports up to 4 levels**

## **DEFINITIONS:**

Words surrounded by brackets, for example, [ENTER], are keys on the RPC.

[XXX] + [XXX] means hold the two keys down simultaneously.

XXX = Key name.

### 3. INSTALLATION

1. Connect the MASTER ROUTER RS422 connector on the back of the RPC to the AMEzi card connector on the GV7000 router.

Communication format: 38400, None, 8, 1.

Configure the AMEzi card to use 20-TEN protocol.

2. Connect the SLAVE ROUTER RS422 connector on the back of the RPC to the connector on the TelectRouter labeled “RS422” (see wiring information below). Communication format: 9600, N, 8, 1.
3. Connect power.
4. Set Telect SYSTEM ADDRESS.

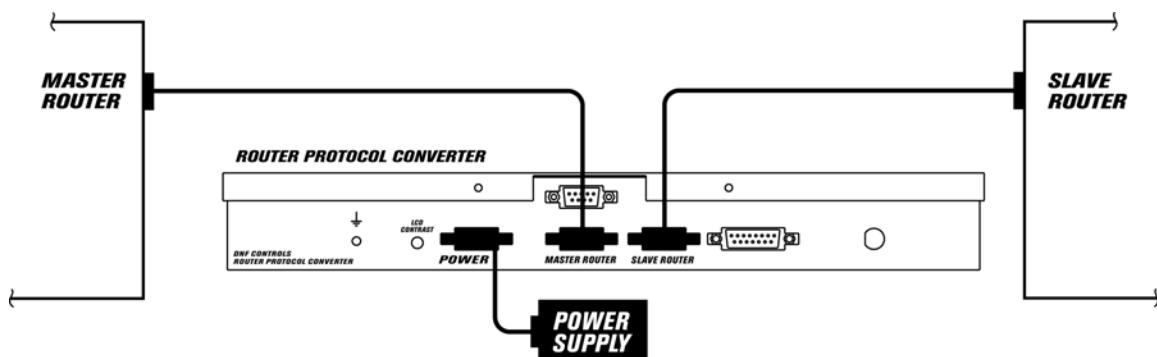
1. Press [SHIFT] + [MENU].
2. Press [→] or [←] until the display shows “Select System Address.”
3. Press [ENTER].
4. The display shows “System Address-X”, where X-the current TELECT System address 0-15.
5. Press [→] or [←] to select the desired system address 0-15.
6. Press [ESC] to save the entered address and exit.

**NOTE:** Default system address = 0.

Selected system address must be equal to the System address defined by the dip switch on the 2357, 2358 or 2359 card of the Telect Router.

(See the Telect Installation Manual for more information.)

The Telect has 8 levels, the GVG has 4 levels.



## **4. GVGSMS7000-TELECT LEVEL MAPPING**

1. Press [SHIFT] + [LEVEL] on the RPC.
2. The display shows “TLC=xx, GVG=yy”, where:  
xx- level on the Telect, yy- corresponding to it level on the GV700.
3. Press [**←**] to walk through all the existing TLE levels and view GVG levels associated with them.
4. Press [**→**] to change GVG level for the selected TLE level or turn it off.
5. Press [ESC] twice when done.

Setup is complete. Now the Telect router behaves as a matrix of the GV7000 router.

## **5. RPC STATUS DISPLAY**

The RPC Display shows the communication status.

If the communications with the GVGSMS7000 is established,  
Then, the first line of the display shows “GVGSMS7000: OK”.

Otherwise, it shows “GVGSMS7000: No Comm”.

Telect does not provide status information.  
The first line of the display will show: “Telect: NO INFO.”

## **6. TEST COMMUNICATION BETWEEN THE GVGSMS7000 AND THE RPC**

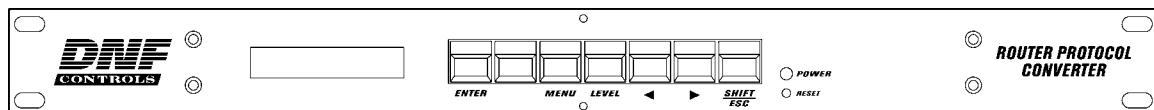
1. Press [SHIFT] + [MENU].
2. Press [**→**] or [**←**] until the display shows GVGSMS7000 TEST.
3. Press [ENTER].
4. The first line of the display shows GVGSMS7000 data.
5. The second line of the display shows data received from the 7000.
6. Press [ESC] to exit test mode.

## 7. TEST COMMUNICATION BETWEEN THE RPC AND THE TELECT

This function is not available; Telect does not provide status information.

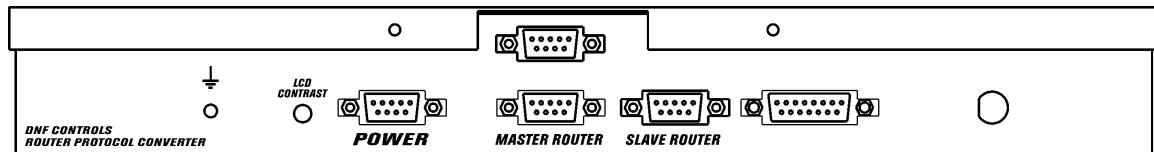
## 8. SPECIFICATIONS

### Front Panel



1 LED	POWER
6 switches	Enter, Menu, <, >, Shift/ESC
Reset Switch	Recessed momentary switch
Display	2 Line LCD, back-lit with adjustable contrast

### Rear Panel



Connectors: Master Router, Slave Router (DB9F)  
POWER (DB9M)

Size: 19" x 5" x 1-3/4" (Rackmount)

Weight: 7 lbs.

Power: 5 volt D.C., 1500 ma. 90-265 VAC  
50/60 Hz converter supplied

**POWER SUPPLY CONNECTOR** 9-Pin D-type, male (DB9M)

Pin#	1	+5Vdc	Pin#	6	+5Vdc
2		+5Vdc	7		Ground
3		Ground	8		Ground
4		nc	9		Ground
5		nc			

## **MASTER ROUTER RS422 SERIAL CONNECTOR**

(Device configuration) 9-Pin D-type, female (DB9F)

Pin #	1	Frame Ground	Pin#	6	Common
	2	Transmit A →		7	Transmit B →
	3	Receive B ←		8	Receive A ←
	4	Common		9	Frame Ground
	5	Spare			

## **SLAVE ROUTER RS422 SERIAL CONNECTOR**

(Controller Configuration) 9-Pin D-type, female (DB9F)

Pin#	1	Frame Ground	Pin#	6	Common
	2	Receive A ←		7	Receive B ←
	3	Transmit B →		8	Transmit A →
	4	Common		9	Frame Ground
	5	Spare			

## **GVG SMS7000 to RPC Wiring Interface**

SMS7000 (RS422 Controller)

RPC (RS422 Device)

Pin#		Pin#	
1	Frame Ground	1	Frame Ground
2	Receive A ←	2	Transmit A →
3	Transmit B →	3	Receive B ←
4	Common	4	Common
5	Spare	5	Spare
6	Common	6	Common
7	Receive B ←	7	Transmit B →
8	Transmit A →	8	Receive A ←
9	Frame Ground	9	Frame Ground

## **RPC to TLE Wiring Interface**

RPC (RS422 Controller)

TLE (RS422 Device)

Pin#		Pin#	
1	Frame Ground	1	Frame Ground
2	Receive A ←	2	Transmit A →
3	Transmit B →	3	Receive B ←
4	Common	4	Common
5	Spare	5	Spare
6	Common	6	Common
7	Receive B ←	7	Transmit B →
8	Transmit A →	8	Receive A ←
9	Frame Ground	9	Frame Ground

## **9. DNF CONTROLS LIMITED WARRANTY**

DNF Controls warrants its product to be free from defects in material and workmanship for a period of one (1) year from the date of sale to the original purchaser from DNF Controls.

In order to enforce the rights under this warranty, the customer must first contact DNF's Customer Support Department to afford the opportunity of identifying and fixing the problem without sending the unit in for repair. If DNF's Customer Support Department cannot fix the problem, the customer will be issued a Returned Merchandise Authorization number (RMA). The customer will then ship the defective product prepaid to DNF Controls with the RMA number clearly indicated on the customer's shipping document. The merchandise is to be shipped to:

DNF Controls  
12843 Foothill Blvd., Suite D  
Sylmar, CA 91342  
USA

Failure to obtain a proper RMA number prior to returning the product may result in the return not being accepted, or in a charge for the required repair.

DNF Controls, at its option, will repair or replace the defective unit. DNF Controls will return the unit prepaid to the customer. The method of shipment is at the discretion of DNF Controls, principally UPS Ground for shipments within the United States of America. Shipments to international customers will be sent via air. Should a customer require the product to be returned in a more expeditious manner, the return shipment will be billed to their freight account.

This warranty will be considered null and void if accident, misuse, abuse, improper line voltage, fire, water, lightning or other acts of God damaged the product. All repair parts are to be supplied by DNF Controls, either directly or through its authorized dealer network. Similarly, any repair work not performed by either DNF Controls or its authorized dealer may void the warranty.

After the warranty period has expired, DNF Controls offers repair services at prices listed in the DNF Controls Price List. DNF Controls reserves the right to refuse repair of any unit outside the warranty period that is deemed non-repairable.

DNF Controls shall not be liable for direct, indirect, incidental, consequential or other types of damage resulting from the use of the product.

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